

TRACTOR, SKID-STEER ENDLOADER, 1,350 LB. OPERATING CAPACITY

- I. **MANUFACTURER'S WARRANTY:** The successful bidder shall be required to furnish a minimum **one year, 2,000 hour** warranty to cover all components furnished. The vendor shall agree to replace and install without charge within the warranty any defective parts or any parts not suitable for the service intended. All warranty work shall be picked up by the vendor within 48 hours of notification by the City and delivered within 48 hours of completion of repairs. Warranty period to begin when the unit is placed into service by the City.

Comply ____ *Exception* ____

- II. **SERVICE FACILITIES:** In order to insure that the City will be able to maintain and repair equipment purchased, the vendor shall operate a service facility capable of performing most repairs associated with the equipment they represent. This facility shall be located within 30 miles of the City of Milwaukee, and be stocked with common replacement and high wear parts, as may be designated by the equipment manufacturer, and approved by the City.

Name of Facility _____

Address _____

Contact Name/Number _____

- III. **SERVICE REQUIREMENTS:** The equipment to be purchased under this specification will be used by the City for the handling of materials with various buckets or implements.
- IV. **TECHNICAL REQUIREMENTS:** All features below shall be incorporated in the equipment and all items furnished and installed into a complete unit ready for operation.
- A. **TYPE:** Heavy-duty four wheel driven skid-steer endloader. An acceptable make and model is as follows, all others proposed shall be equal to, or exceed it:

New Holland L150 *Make/Model* _____

1. **RATED OPERATING CAPACITY:** Minimum 1,350 lbs. SAE rated operating load.

Operating Capacity _____ *Lbs.*

2. **TIPPING LOAD:** Minimum 2,700 lbs. SAE rated, prior to counterweight installation.

Tipping Load _____ *Lbs.*

3. **OPERATING WEIGHT:** Minimum 4,500 lbs. SAE rated.

Operating Weight _____ *Lbs.*

- B. **DIMENSIONS:**

1. **LENGTH:** Approximately 120", with bucket.

Length _____

2. WIDTH: Approximately 60", without bucket, including tire width.

Width _____

3. WHEELBASE: Approximately 38".

Wheelbase _____

4. HEIGHT TO TOP OF CAB: Approximately 73" from ground to top of cab.

Height _____

5. HEIGHT TO RAISED HINGE PIN: Minimum 111".

Hinge Pin Height _____

- C. ENGINE: Diesel powered, liquid cooled engine, minimum 91 cubic inch displacement, minimum 35 to maximum 39 gross horsepower.

Engine Make/Model _____

Liters _____ *Cubic Inches* _____ *HP @* _____ *RPM*

1. FILTERS: Air, oil, and fuel, with a Filter Minder air filter restriction indicator.

Comply ____ *Exception* ____

2. STARTING AID: A City approved cold weather starting aid system shall be provided.

Comply ____ *Exception* ____

3. COOLING SYSTEM: Of adequate capacity for continuous use, with permanent antifreeze protected to -35° F.

Comply ____ *Exception* ____

4. FUEL TANK: 8-gallon minimum capacity, containing a FULL AMOUNT of fuel at time of delivery to the City.

Fuel Tank Capacity _____ *Comply* ____ *Exception* ____

5. THROTTLE: Adjustable type hand throttle control.

Comply ____ *Exception* ____

6. MUFFLER: Spark arrestor type, with horizontal discharge.

Comply ____ *Exception* ____

- D. TRANSMISSION/STEERING: Hydrostatic, with both direction and steering controlled through independent right and left hand control levers, to operate as per City approval. The top forward travel speed shall be minimum 7 MPH.

Travel Speed _____ *MPH* *Comply* ____ *Exception* ____

1. FINAL DRIVE: There shall be one independent drive chain to each wheel.

Comply ____ *Exception* ____

- E. AXLES/TIRES: Heavy-duty axles, with 10 x 16.5 **Bullman Semi-Pneumatic** flat proof air cushioned tires, with molded traction treads.
http://www.bullman.com/index.php?option=com_content&task=view&id=1&Itemid=6

Tire Make/Model _____ *Comply* ____ *Exception* ____

- F. PARKING BRAKE: In addition to the hydrostatic transmission, which provides service brakes, there shall be a parking brake, complete with cab control.

Comply ____ *Exception* ____

- G. LOADER: Dual arm, parallel-lift front-end loader with two double acting lift cylinders and two double acting tilt cylinders. NOTE: The design of the lift arm assembly shall not impede the operator's view of the rear area of the endloader when the loader arms are raised.

Comply ____ *Exception* ____

1. QUICK CHANGE ASSEMBLY: The endloader pivot shall have a quick-change assembly for implements and attachments, compatible with existing City equipment. This assembly shall operate mechanically to line up, secure and lock each attachment to the endloader.

Comply ____ *Exception* ____

2. CONTROLS: The endloader lift and tilt shall be controlled through foot pedals as follows:

Comply ____ *Exception* ____

- a. LEFT PEDAL-BOOM: Push forward to lower, push backward to raise.

Comply ____ *Exception* ____

- b. RIGHT PEDAL-BUCKET: Push forward to dump, push backward to tilt back.

Comply ____ *Exception* ____

3. GRAPPLE BUCKET: Each endloader purchased shall be equipped with one Virnig SBG-60 60" wide scrap grapple bucket, with independent right and left grapple sections, each hydraulically operated. This bucket shall have a bolt-on cutting edge.

4. SNOW BUCKET: One 72" wide snow bucket, complete with replaceable bolt-on cutting edge. No digging teeth shall be provided. To assist with light duty pulling operations, the vendor shall install one 5" long surface mount tie-down ring onto the center interior rear wall of the bucket.

Comply ____ *Exception* ____

5. COUNTERWEIGHT: A 300 lb. total counterweight package shall be installed at the lower rear of the endloader.

Comply ____ *Exception* ____

6. BOOM LOCK: A mechanical boom lock system shall be permanently attached and

operable from the cab, to lock the raised arms for engine servicing.

Comply ____ *Exception* ____

- H. HYDRAULIC SYSTEM: Complete system, capable of simultaneous use of lift and tilt, while the tractor is moving.

Comply ____ *Exception* ____

1. PUMP: Minimum 11.0 gallon per minute (GPM) rating @ 2,500 PSI, for continuous use.

Comply ____ *Exception* ____

2. RESERVOIR: Capacity as required for continuous use, with City approved filler, a sight glass or dipstick, and magnetic drain plug.

Comply ____ *Exception* ____

3. AUXILIARY CIRCUIT: For use with a grapple bucket and other front mounted implements, such as a sweeper, complete with a four-way, self centering control valve. The lines shall be run along the boom and terminate near the end loader pivot hinge through hydraulic quick disconnect fittings with dust caps. The quick disconnect fittings shall be Parker 6602-8-10S and 6601-8-10S. Any implement furnished with each tractor shall have corresponding quick-disconnect fittings. The controls shall be incorporated into the right side hand stick control as follows:

Comply ____ *Exception* ____

- a. CONTROL: Right to open grapple, left to close grapple or hard left with detent to operate sweeper.

Comply ____ *Exception* ____

4. FILTER: Minimum 4 micron rating, spin-on type, with service indicator and provisions as needed to change the filter without draining the system.

Comply ____ *Exception* ____

5. LINES/HOSES/FITTINGS: The hydraulic lines shall be steel tube where possible, with minimum two-wire braided hydraulic hose where necessary. All fittings shall be permanent type. Corded type hose with clamps, black iron or galvanized pipe and/or hardware and NPT type fittings will not be acceptable, unless as approved by the City.

Comply ____ *Exception* ____

- I. ELECTRICAL SYSTEM: Complete 12-volt negative ground system. All installed electrical accessories and wiring shall comply with City Specification #34-A-13 dated April 15, 2005, copy attached.

Comply ____ *Exception* ____

1. ALTERNATOR: Minimum 40 amp.

Amps ____ *Comply* ____ *Exception* ____

2. STARTER: With cab mounted key switch.

Comply ____ *Exception* ____

3. BATTERY: BCI Group 31, minimum 900 CCA @ 0° F, with threaded posts. Any substitutions are subject to City approval.
CCA _____ *Comply* ____ *Exception* ____
4. LIGHTING:
- a. HEADLIGHTS: Two mounted at the front of the cab, on or near the roof.
Comply ____ *Exception* ____
- b. TAIL LIGHTS: Two red tail lights, and one flood light, mounted at the rear roof area of the unit.
Comply ____ *Exception* ____
- c. ROOF WARNING LIGHT: Halogen rotating reflector type warning light, **Target Tech Sentry 448152**, with rough duty bulb, amber lens, and 448310 vibration kit, mounted in a City approved location, with a separate dash mounted switch.
Comply ____ *Exception* ____
5. BACKUP ALARM: Mounted at the rear within the engine compartment, electronic type, **Federal Signal 210330**, 87 decibels **maximum**.
Comply ____ *Exception* ____
6. HORN: Single note electric horn.
Comply ____ *Exception* ____
- J. OPERATOR ENCLOSURE: To include a roll-over protection structure (ROPS), a full coverage roof, padded operator seat, operator safety restraint system, side screens and grab handles for safe entry into and exit from the operator seat. The entire structure shall tilt to allow servicing of the engine and hydraulic system.
Comply ____ *Exception* ____
1. DASHBOARD CONTROLS: All implements and accessories shall be controlled from the cab. There shall be a fuel gauge, coolant temperature, electrical system and oil pressure indicators, and an hourmeter installed on the dashboard. In addition, there shall be a diagnostic panel with a visual and audible warning system for critical engine functions, with engine shut-down for low oil pressure and/or high coolant temperature.
Comply ____ *Exception* ____
- K. CAB: A fully enclosed and weathersealed cab with 360° visibility, sound deadening package, headliner, sun visor and dome light. The cab shall tilt with the ROPS structure to allow servicing of the engine and hydraulic system. The cab shall include all of the following:
Comply ____ *Exception* ____
1. DOOR-WINDOWS: The door shall be removable, equipped with a key lock. The side windows shall be movable type.
Comply ____ *Exception* ____

2. WINDSHIELD WIPER: Door mounted windshield wiper with electrical disconnect.

Comply ____ *Exception* ____

3. VENTILATION SYSTEM: To provide cab heat, with directional deflectors for use as a windshield defroster, and for warm weather ventilation. A two speed fan switch shall be provided, and a temperature control. In addition, the vendor shall furnish and install within the cab, one two-speed personal fan for use by the operator

Comply ____ *Exception* ____

- L. ENGINE COVER: The rear of this tractor shall have a hinged heavy wall steel cover with vandal protection to protect the rear of the engine and allow servicing. The sides and top cover shall be completely removable **without the use of hand tools**.

Comply ____ *Exception* ____

- V. PAINTING: This equipment shall be painted with a City approved yellow acrylic enamel. If a substantial discount is available by allowing the use of the standard factory color, this discount shall be listed within the bid. The cab and bucket may be painted gray or black.

Paint Code/Color _____ *Comply* ____ *Exception* ____

- VI. PARTS LISTS AND MANUALS: Four parts lists and service manuals shall be furnished for all tractors purchased, to include four bucket manuals, and two complete engine service, rebuild and parts information manuals. All manuals shall be delivered to 2142 W. Canal Street, Room 216, 414-286-2719. Compliance with this paragraph is required prior to final payment.

Comply ____ *Exception* ____

- VIII. TRAINING/INSTRUCTIONS: Training shall be provided by factory trained personnel with regard to basic operation and maintenance. This training shall be minimum four hours in duration, held at the City, to include up to 15 City personnel.

Comply ____ *Exception* ____

- IX. DELIVERY: The following describes the procedure to be used in the delivery of the equipment and its documentation. NOTE: The City of Milwaukee is tax exempt.

- A. INVOICES: All original invoices shall be sent to 2142 W. Canal Street, Milwaukee, WI 53233, Room 216, attention, Equipment Acquisition & Disposal Coordinator. NOTE: The City of Milwaukee is tax exempt.

Comply ____ *Exception* ____

- C. OWNERSHIP: These forms shall be filled out to reflect the owner as follows:

CITY OF MILWAUKEE FLEET SERVICES
2142 W. Canal Street
Milwaukee WI 53233

Comply ____ *Exception* ____

- X. LIQUIDATED DAMAGES (LATE DELIVERY): Vendor shall deliver the skid-steer loader to

the City of Milwaukee no later than **ninety (90) calendar days from the time of receipt of the purchase order**. Failure of the vendor to meet this delivery requirement shall result in an assessment amounting to one hundred dollars (\$100) per unit for every day delivery is delayed. Said assessment shall be deducted from the City's final payment of the vendor's invoice.

Comply ____ *Exception* ____

- XI. EXCEPTIONS: Bidders shall attach information to fully explain any exceptions taken to the above specification items. Unless otherwise noted, the above are minimum requirements for the equipment described in this specification. All requirements must be met. An exception that provides a component which exceeds the minimum requirement, such as a larger horsepower engine, will usually be considered as acceptable, provided all other criteria are met. ***Likewise, an exception that provides a component which does not meet the minimum requirement will usually be considered unacceptable.***